

Phase 5: Performance Testing

DATE	1 NOVEMBER 2025
TEAM ID	NM2025TMID06105
PROJECT NAME	Calculating Family Expenses using ServiceNow

1. Testing Objective:

The objective of testing is to ensure that the Family Expense Tracker in ServiceNow works correctly, calculates totals accurately, and updates records in real-time without errors.

2. Types of Testing Performed:

Testing Type	Description
Unit Testing	Tested each table and field individually
Functional Testing	Verified all features work as expected
Integration Testing	Checked link between Daily Expense & Family Expense tables
Validation Testing	Ensured mandatory fields & correct data entry
Performance Testing	Verified system updated totals instantly
User Acceptance Testing (UAT)	Ensured the solution is user-friendly & meets objectives

3. Test Cases:

Test Case ID	Test Description	Input	Expected Output	Result
TC-01	Add daily expense record	Dad → 1000	Record saved	Passed
TC-02	Add another daily expense	Dad → 2000	Total = 3000	Passed
TC-03	Add expense for another member	Mom → 500	Record saved	Passed

TC-04	Check total for Mom	Mom → 500	Correct total	Passed
TC-05	Check auto-generated number	Save record	Auto-ID generated	Passed
TC-06	Invalid amount entry	Blank amount	Error shown	Passed
TC-07	Submit without date	Blank date	Error shown	Passed

4. Performance Metrics:

Parameter	Result
Record Save Time	Less than a second
Total Calculation Time	Instant update
Page Load Speed	Smooth
System Load Handling	Stable for multiple entries

5. Observations & Findings:

- Daily expenses correctly update Family Total
- Business Rule triggers worked properly
- Auto-Numbering works
- Reference field links correctly
- No performance lag
- Data remains consistent after multiple entries

6. Pictures for references:

6.1. Daily Expense Table:

The screenshot shows the ServiceNow dictionary view for the 'Table - Daily Expenses' table. The table lists various columns with their properties:

Column label	Type	Reference	Max length	Default value	Display
Comments	String	(empty)	800		false
Created	Date/Time	(empty)	40		false
Created by	String	(empty)	40		false
Date	Date	(empty)	40		false
Expense	Integer	(empty)	40		false
Number	String	(empty)	40	javascript:global.getNextObjNumberPadded();	false
Sys ID	Sys ID (GUID)	(empty)	32		false
Updated	Date/Time	(empty)	40		false
Updated by	String	(empty)	40		false
Updates	Integer	(empty)	40		false

At the bottom of the table, there is a link 'Insert a new row...'.

6.2. Family Expense Table:

The screenshot shows the ServiceNow interface for managing the 'Family Expenses' table. The top navigation bar includes links for 'Family Expenses | Table | Service', 'Quick project suggestions', 'Prevent-User-Deletion-if-Assigned', and other system navigation. The main title is 'Table - Family Expenses'. Below the title, there's a search bar and buttons for 'Delete', 'Update', and 'Delete All Records'. A toolbar with various icons is visible above the table. The table itself has columns for 'Column label', 'Type', 'Reference', 'Max length', 'Default value', and 'Display'. Rows listed include 'Amount' (Integer), 'Created' (Date/Time), 'Created by' (String), 'Date' (Date), 'Expense Details' (String), 'Number' (String), 'Sys ID' (Sys ID (GUID)), 'Updated' (Date/Time), 'Updated by' (String), and 'Updates' (Integer). A note at the bottom of the table area says 'Insert a new row...'. At the bottom of the page, it says 'No templates are available' with a 'Create A New One?' link.

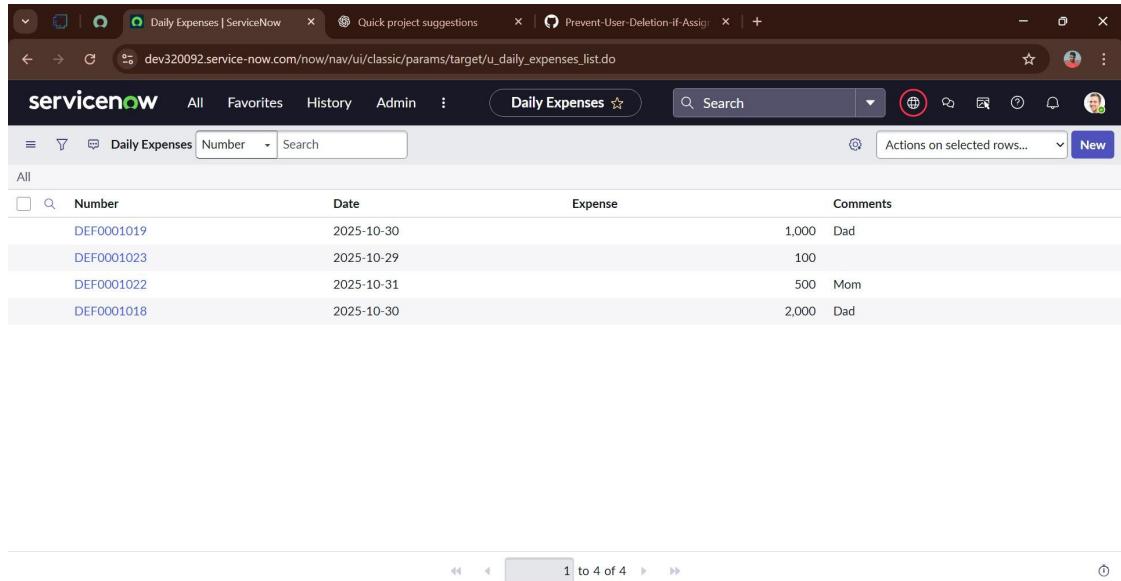
6.3. Business Rules Script:

The screenshot shows the ServiceNow interface for creating a business rule named 'Business Rule - Family Expenses BR'. The top navigation bar includes links for 'Business Rule - Family Expenses BR', 'Quick project suggestions', 'Prevent-User-Deletion-if-Assigned', and other system navigation. The main title is 'Business Rule - Family Expenses BR'. Below the title, there's a search bar and buttons for 'Update' and 'Delete'. A toolbar with various icons is visible above the script editor. The script editor contains the following code:

```
1 (function executeRule(current, previous /*null when async*/) {
2     var FamilyExpenses = new GlideRecord('u_family_expenses');
3     FamilyExpenses.addQuery('u_date', current.u_date);
4     FamilyExpenses.query();
5
6     if(FamilyExpenses.next()) {
7         FamilyExpenses.u_amount += current.u_expense;
8         FamilyExpenses.u_expense_details += " > " + current.u_comments + ":" + "Rs." +
9             current.u_expense + " / ";
10        FamilyExpenses.update();
11    }
12    else {
13        var NewFamilyExpenses = new GlideRecord('u_family_expenses');
14        NewFamilyExpenses.u_date = current.u_date;
15        NewFamilyExpenses.u_amount = current.u_expense;
16        NewFamilyExpenses.u_expense_details = " > " + current.u_comments + ":" + "Rs." +
17            current.u_expense + " / ";
18        NewFamilyExpenses.insert();
19    }
20 })(current, previous);
```

At the bottom of the page, it says 'No templates are available' with a 'Create A New One?' link.

6.4. Input in Daily Expenses

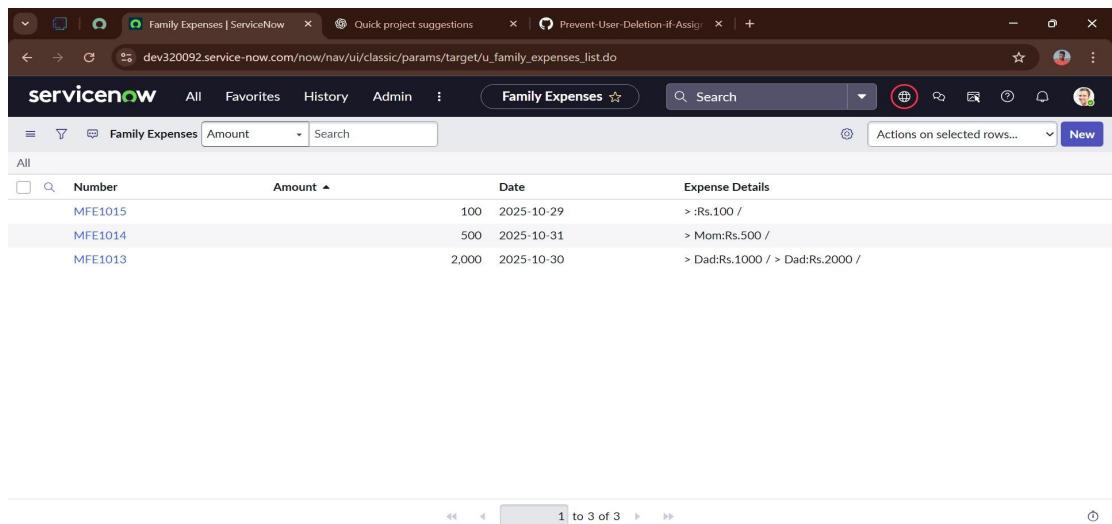


The screenshot shows a ServiceNow web interface for the 'Daily Expenses' list. The page title is 'Daily Expenses | ServiceNow'. The top navigation bar includes links for 'All', 'Favorites', 'History', 'Admin', and the current list view. The main header has a search bar and a 'New' button. Below the header is a table with columns: 'Number', 'Date', 'Expense', and 'Comments'. The table contains the following data:

Number	Date	Expense	Comments
DEF0001019	2025-10-30	1,000	Dad
DEF0001023	2025-10-29	100	
DEF0001022	2025-10-31	500	Mom
DEF0001018	2025-10-30	2,000	Dad

At the bottom of the table, there is a pagination control showing '1 to 4 of 4'.

6.5. Output in Family Expenses:



The screenshot shows a ServiceNow web interface for the 'Family Expenses' list. The page title is 'Family Expenses | ServiceNow'. The top navigation bar includes links for 'All', 'Favorites', 'History', 'Admin', and the current list view. The main header has a search bar and a 'New' button. Below the header is a table with columns: 'Number', 'Amount', 'Date', and 'Expense Details'. The table contains the following data:

Number	Amount	Date	Expense Details
MFE1015	100	2025-10-29	> :Rs.100 /
MFE1014	500	2025-10-31	> Mom:Rs.500 /
MFE1013	2,000	2025-10-30	> Dad:Rs.1000 / > Dad:Rs.2000 /

At the bottom of the table, there is a pagination control showing '1 to 3 of 3'.